



SAFAS is proud to introduce a reliable and simple-to-use spectrophotometer, with an unparalleled cost-effectiveness.

Easyspec



THE EBERT mount monochromator near UV-Vis spectrophotometer

HIGH TECHNOLOGY UV-VIS SPECTROSCOPY

SAFAS QUALITY AT THE PRICE OF A SIMPLE SPECTROPHOTOMETER

EBERT mount monochromators are usually reserved to high level instruments; nevertheless, Easyspec has been fitted with **sealed quality optics and mechanics**, instead of the cheap monochromators generally used on equivalent instruments, whether patented or not. Thanks to their EBERT mount monochromators, to quality optics on metallic holders (no plastic!), **Easyspec series provide a very low straylight on the whole wavelength range of the instrument.**

This point is very important : a straylight of 1% involves a 5% error at 1 A (as much as 0.050 A!), and this error dramatically increases at higher Absorbances... On the contrary, **Easyspec will just provide 0.2% error (only 0.002 A)** in the same conditions. At the ASTM test wavelength (340nm), Easyspec straylight is **<0.05%**; but the same result could be obtained on a poor-optics instrument which would insert an additional filter at 340nm! **Because you are not working only at 340nm, Easyspec also guarantees a straylight < 0.5% from 320 to 1100nm**, where instruments fitted with cheap optics may involve huge errors.

Dark current compensation is essential to accuracy: it is **full automatic on Easyspec**. To associate high accuracy and low maintenance costs, **dark current compensation is achieved by a shutter, not by a chopper**; in this way, corresponding 50% loss of energy is avoided, and a wearing part is eliminated.

An universal cuvette and tube holder is supplied standard, for cuvettes of 5, 10 and 50mm of O.P., and tubes of 13 or 25mm of diameter.

2 VERSIONS AVAILABLE:

- **Easyspec (basic version)** is fitted with a **VERY long life source**, which you typically will not have to replace for several years of standard use... It features a **very good bandwidth of only 5 nm** (i.e. ± 2.5 nm), which is perfect for most of applications.



-For the most demanding applications, **Easyspec+ version** has an **outstanding bandwidth of 2nm** (i.e. ± 1 nm). Such a resolution requires a high energy source, an easy-to-replace tungsten -halogen lamp, whose higher energy enables to work with a very small bandwidth, and has a typical life of 2.500 hours.

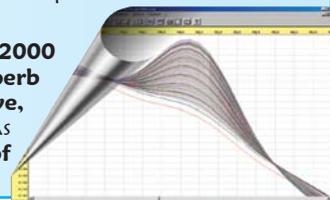
On both versions, a built-in Holmium filter enables to Validate the wavelengths at any moment; such a standard is expensive when purchased separately, and it cannot be broken or lost when it is built-in. You will be sure to keep an excellent accuracy and linearity of wavelengths, day after day, year after year, with an amazing stability and reproducibility of your measurements. **An exceptional cost effectiveness for a very serious instrument, ideally fitting medical, industrial, environmental & research applications, as well as educational purposes thanks to its reliability, low ownership costs and robustness in pupils hands.**

MULTI-LANGUAGE and EASY-TO-USE SOFTWARE



***WITHOUT PC COMPUTER**: the colored large 22-keys sealed alphanumeric color keyboard and the very large backlit sealed LCD display provides **great ease-of-use, turning spectroscopy to a child's play**, with plenty of intuitive functions, concentrations with simple factor or calibration curve (up to 10 standards), kinetics with auto-calculation of end-point, and user-selectable language. **Two display modes are available: ZOOM mode** (very big digits, very useful to train groups of persons or follow up measurements at distance), and **SIMULTANEOUS DISPLAY mode (Abs-%T-Conc-Wavelength-Energy)**. A complete test and maintenance menu is included, for automatic or manual validation.

***WITH PC COMPUTER**: for more sophisticated operations, our **spectroscopy software SAFAS SP2000 for PC computer** (via USB) is compatible with Windows 2000/Me/NT/XP/Vista/Seven. It provides **superb versatility** and is **very easy to use, with unlimited storage in libraries, multizoom, multicurve, auto baseline subtraction, multiple-window operation, and linear or non-linear regression**. As Easyspec instruments are designed for a very long term use, the **software updates are supplied free of charge for instrument's life** (excepted participation to copy + shipment expenses).



MAIN SPECIFICATIONS

WAVELENGTHS: range from 320 to 1100nm, Accuracy ± 1 nm, Repeatability ± 0.15 nm
BANDWIDTH for Easyspec version: 5nm (± 2.5 nm) / Easyspec+ version: 2nm (± 1 nm)
STRAYLIGHT <0.05% at 340nm (ASTM) AND <0.5% from 320 to 1100 nm

Auto-zero of Abs and 100%T - Automatic dark current compensation, chopper-free (no wearing parts!) - Measurement Units: Abs, %T and Concentration - Photometric accuracy $\pm 1\%$ at 1 A - Measurement range : -0.2 to 3.5 A and 0 to 150%T - INPUT/OUTPUT: USB Com port (standard), parallel printer port (optional), analog output 0-1 Volt (optional) - Built-in Holmium filter and source alignment utility are standard features. UNIVERSAL CUVETTE HOLDER is built-in standard for cuvettes of 5, 10 or 50mm O.P. and tubes of 13 and 25mm diameter. Many options: auto-sipper and pump, temperature control, software, printer, and possibility to develop on-purpose accessories on request. Mains: 115/230V 50/60Hz. Size: 400x300x145 mm, weight 10Kg.

Instrument supplied ready-for-use and complete, including a QUALITY OPTICAL GLASS CUVETTE, 10 disposable Cuvettes, 6 borosilicate tubes of 13mm diameter, a validation standard HOLMIUM FILTER (built-in), dust-cover and universal tube-cuvette holder. Also supplied standard: memory for 30 methods with individual name, calibration curve on 10 standards, and kinetics.

N.B.: ± 2.5 nm notation for bandpass is a nonsense, but it is sometimes used. Photographs are not contractual. All features subject to change without notice. The instruments are delivered without computer and without serial cord. The software for PC computer is optional.

distributed by:



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